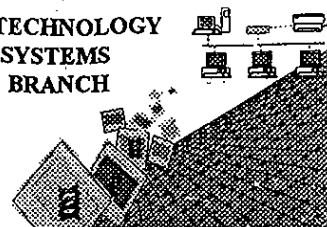


BIOTECHNOLOGY  
SYSTEMS  
BRANCH



**RAW SEQUENCE LISTING**  
**ERROR REPORT**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/635,265A

Source: IFWO

Date Processed by STIC: 1/13/04

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 703-308-4212; FAX: 703-308-4221  
Effective 12/13/03: TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.1 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker/chkr41note.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry directly to (EFFECTIVE 12/01/03):  
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 4B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 10/08/03

## Raw Sequence Listing Error Summary

### ERROR DETECTED

### SUGGESTED CORRECTION

SERIAL NUMBER:

10/635,265A

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1      Wrapped Nucleics  
    Wrapped Aminos     The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
  
- 2      Invalid Line Length     The rules require that a line not exceed 72 characters in length. This includes white spaces.
  
- 3      Misaligned Amino  
    Numbering     The numbering under each 5<sup>th</sup> amino acid is misaligned. Do not use tab codes between numbers; use **space characters**, instead.
  
- 4      Non-ASCII     The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
  
- 5      Variable Length     Sequence(s) 3 contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
  
- 6      PatentIn 2.0  
    "bug"     A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s)             . Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
  
- 7      Skipped Sequences  
    (OLD RULES)     Sequence(s)      missing. If intentional, please insert the following lines for each skipped sequence:  
                                   (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  
                                   (i)     SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)  
                                   (xi) SEQUENCE DESCRIPTION: SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  
                                   This sequence is intentionally skipped  
  
                                   Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
  
- 8      Skipped Sequences  
    (NEW RULES)     Sequence(s)      missing. If intentional, please insert the following lines for each skipped sequence.  
                                   <210> sequence id number  
                                   <400> sequence id number  
                                   000
  
- 9      Use of n's or Xaa's  
    (NEW RULES)     Use of n's and/or Xaa's have been detected in the Sequence Listing.  
                                   Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.  
                                   In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
  
- 10      Invalid <213>  
    Response     Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
  
- 11      Use of <220>     Sequence(s)      missing the <220> "Feature" and associated numeric identifiers and responses.  
                                   Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.  
                                   (See "Federal Register," 07/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
  
- 12      PatentIn 2.0  
    "bug"     Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
  
- 13      Misuse of n/Xaa     "n" can only represent a single nucleotide; "Xaa" can only represent a single amino acid



IFWO

## RAW SEQUENCE LISTING

DATE: 01/13/2004

PATENT APPLICATION: US/10/635,265A

TIME: 15:17:21

Input Set : A:\180-158-2 seq listing.ST25rev1.txt

Output Set: N:\CRF4\01132004\J635265A.raw

3 <110> APPLICANT: Duke University  
 4 York, John D  
 6 <120> TITLE OF INVENTION: NOVEL TARGETS FOR LITHIUM THERAPY AND TOXICITY TREATMENT  
 8 <130> FILE REFERENCE: 180/158/2  
 C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/635,265A  
 C--> 10 <141> CURRENT FILING DATE: 2003-08-06  
 10 <150> PRIOR APPLICATION NUMBER: US 60/401480  
 11 <151> PRIOR FILING DATE: 2002-08-06  
 13 <160> NUMBER OF SEQ ID NOS: 24  
 15 <170> SOFTWARE: PatentIn version 3.2  
 17 <210> SEQ ID NO: 1  
 18 <211> LENGTH: 2113  
 19 <212> TYPE: DNA  
 20 <213> ORGANISM: Homo sapiens  
 23 <220> FEATURE:  
 24 <221> NAME/KEY: mRNA  
 25 <222> LOCATION: (1)..(2113)  
 27 <400> SEQUENCE: 1  
 28 ggaattcggc acgagaagct cggtagtggc cacaacgagg gacctgggtc tacgataacg 60  
 30 cgcttttgcct cctcctgaag tgtctttggc ccaacgttgt tccagagtgt accatggcctt 120  
 32 ccagtaacac tgtgttgatg cggttggtag cctccgcata ttctattgct caaaaggcag 180  
 34 gaatgatagt cagacgtgtt attgctgaag gagacctggg tattgtggag aagacctgtg 240  
 36 caacagacct gcagaccaa gctgaccgat tggcacagat gagcatatgt tcttcattgg 300  
 38 cccggaaatt ccccaaactc acaattatag ggggaagagga tctgccttct gaggaagtgg 360  
 40 atcaagagct gattgaagac agtcagtggg aagaaatact gaagcaacca tgcccatcgc 420  
 42 agtacagtgc tattaaagaa gaagatctcg tggctctgggt tgatcctctg gatggaacca 480  
 44 aggaatatac cgaaggctct cttgacaatg taacagttct tattggaatt gcttatgaag 540  
 46 gaaaagccat agcaggagtt attaacacgc catattacaa ctatgaggca ggaccagatg 600  
 48 ctgtgttggg gaggacaatc tggggagttt taggtttagg cgcctttggg tttcagctga 660  
 50 aagaagtccc tgctgggaaa cacattatca caactactcg atcccatagc aacaagttgg 720  
 52 ttactgactg tgttgctgct atgaaccccg atgctgtgct gcgagtagga ggagcaggaa 780  
 54 ataagattat tcagctgatt gaaggcaaag cctctgctta tgtatttgca agtcctgggtt 840  
 56 gtaagaagtg ggatacttgt gctccagaag ttattttaca tgctgtggga ggcaagttaa 900  
 58 ccgatatcca tgggaatgtt cttcagtacc acaaggatgt gaagcatatg aactctgcag 960  
 60 gagtcctggc cacactgagg aattatgact actatgcaag ccgagttcca gaatctatta 1020  
 62 aaaatgcact tgttccttaa aggaaagttt catttggccg ggccggtggc ctcatgcctg 1080  
 64 taatcccagc actttgggag gccgaggcag gtggatcact tgagctcagg agtttgagac 1140  
 66 cagcctgggc aatatcgtga gaccccatct ctacaaaaat acaaattaac tgggcatcct 1200  
 68 gtcatgcgcc tgtcatccca gctacttgag aggctgaagc agaagaatct cttgagcccg 1260  
 70 gaaggcggag gttgcagtga gctgagatcg tgccactgca ctccagcctg agtgacagga 1320  
 72 gttaagccct gtctcagaaa aaaaacataa acccaaaaag tacttaaaagt ttcatttact 1380  
 74 tactaggaaa agacttgggt ctcaaataat acattttaag attaattggg tagaattaga 1440  
 76 gttccacctt tatcattgtt gacagtgatt tatatttagt tatatatitga gaataaaaat 1500

PP. 3, 6-7  
 Does Not Comply  
 Corrected Diskette Needed

## RAW SEQUENCE LISTING

DATE: 01/13/2004

PATENT APPLICATION: US/10/635,265A

TIME: 15:17:21

Input Set : A:\180-158-2 seq listing.ST25rev1.txt

Output Set: N:\CRF4\01132004\J635265A.raw

```

78 taactaaata atttaacttg attaatacca ttactcaacc tgacaattga gttggagact 1560
80 tataaactca ttatggttat catgtgtttt cctgttgaat gtgaagaagt gagaaaacat 1620
82 ttgccaatga cagttaggcg tgcacactga ccattcactg ataaaccaga ttctgcctga 1680
84 atctgaaggg attgcttgta gcatagggtt tagtggcgtg atcttgggtc actgcggccc 1740
86 gcttccgggg ttcattgctt tcctgcctag ctccgggtag ctgggactgc agcacggccc 1800
88 acgctggtaa ttttttgtat gatggtgaga agttttcacc gtgttgccag gatggcttat 1860
90 cctgacatcg tgatctgtat gcctcggatc ccaaagtga tgggatgaca gctgtgagcc 1920
92 accgcacttg gcttaaacca gatttcttta gggcacattt ttttgaatc tcaactctgtt 1980
94 tttcacagta attttaaaaa cgttttatcc aattagaata tatatgatgt tattatatat 2040
96 gcttatgaaa cagatttatg agaaaagttt tttttaaata aattatttaa tccctaaaaa 2100
98 aaaaaaaaaa aaa 2113
101 <210> SEQ ID NO: 2
102 <211> LENGTH: 308
103 <212> TYPE: PRT
104 <213> ORGANISM: Homo sapiens
107 <220> FEATURE:
108 <221> NAME/KEY: PEPTIDE
109 <222> LOCATION: (1)..(308)
111 <400> SEQUENCE: 2
113 Met Ala Ser Ser Asn Thr Val Leu Met Arg Leu Val Ala Ser Ala Tyr
114 1 5 10 15
117 Ser Ile Ala Gln Lys Ala Gly Met Ile Val Arg Arg Val Ile Ala Glu
118 20 25 30
121 Gly Asp Leu Gly Ile Val Glu Lys Thr Cys Ala Thr Asp Leu Gln Thr
122 35 40 45
125 Lys Ala Asp Arg Leu Ala Gln Met Ser Ile Cys Ser Ser Leu Ala Arg
126 50 55 60
129 Lys Phe Pro Lys Leu Thr Ile Ile Gly Glu Glu Asp Leu Pro Ser Glu
130 65 70 75 80
133 Glu Val Asp Gln Glu Leu Ile Glu Asp Ser Gln Trp Glu Glu Ile Leu
134 85 90 95
137 Lys Gln Pro Cys Pro Ser Gln Tyr Ser Ala Ile Lys Glu Glu Asp Leu
138 100 105 110
141 Val Val Trp Val Asp Pro Leu Asp Gly Thr Lys Glu Tyr Thr Glu Gly
142 115 120 125
145 Leu Leu Asp Asn Val Thr Val Leu Ile Gly Ile Ala Tyr Glu Gly Lys
146 130 135 140
149 Ala Ile Ala Gly Val Ile Asn Gln Pro Tyr Tyr Asn Tyr Glu Ala Gly
150 145 150 155 160
153 Pro Asp Ala Val Leu Gly Arg Thr Ile Trp Gly Val Leu Gly Leu Gly
154 165 170 175
157 Ala Phe Gly Phe Gln Leu Lys Glu Val Pro Ala Gly Lys His Ile Ile
158 180 185 190
161 Thr Thr Thr Arg Ser His Ser Asn Lys Leu Val Thr Asp Cys Val Ala
162 195 200 205
165 Ala Met Asn Pro Asp Ala Val Leu Arg Val Gly Gly Ala Gly Asn Lys
166 210 215 220
169 Ile Ile Gln Leu Ile Glu Gly Lys Ala Ser Ala Tyr Val Phe Ala Ser
170 225 230 235 240

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## RAW SEQUENCE LISTING

DATE: 01/13/2004

PATENT APPLICATION: US/10/635,265A

TIME: 15:17:21

Input Set : A:\180-158-2 seq listing.ST25rev1.txt

Output Set: N:\CRF4\01132004\J635265A.raw

173 Pro Gly Cys Lys Lys Trp Asp Thr Cys Ala Pro Glu Val Ile Leu His  
174                                   245                                   250                                   255  
177 Ala Val Gly Gly Lys Leu Thr Asp Ile His Gly Asn Val Leu Gln Tyr  
178                                   260                                   265                                   270  
181 His Lys Asp Val Lys His Met Asn Ser Ala Gly Val Leu Ala Thr Leu  
182                                   275                                   280                                   285  
185 Arg Asn Tyr Asp Tyr Tyr Ala Ser Arg Val Pro Glu Ser Ile Lys Asn  
186                                   290                                   295                                   300  
189 Ala Leu Val Pro  
190 305

193 &lt;210&gt; SEQ ID NO: 3

194 &lt;211&gt; LENGTH: 27

195 &lt;212&gt; TYPE: PRT

196 &lt;213&gt; ORGANISM: Artificial

198 &lt;220&gt; FEATURE:

199 &lt;223&gt; OTHER INFORMATION: Li-sensitive sequence uniting motif.

202 &lt;220&gt; FEATURE:

203 &lt;221&gt; NAME/KEY: MISC\_FEATURE

204 &lt;222&gt; LOCATION: (2)..(2)

205 &lt;223&gt; OTHER INFORMATION: X is any number of integers of any amino acid.

207 &lt;220&gt; FEATURE:

208 &lt;221&gt; NAME/KEY: MISC\_FEATURE

209 &lt;222&gt; LOCATION: (5)..(5)

210 &lt;223&gt; OTHER INFORMATION: X is any number of integers of any amino acid.

212 &lt;220&gt; FEATURE:

213 &lt;221&gt; NAME/KEY: MISC\_FEATURE

214 &lt;222&gt; LOCATION: (8)..(8)

215 &lt;223&gt; OTHER INFORMATION: X is isoleucine or an amino acid that can be conservatively substituted in place thereof.

218 &lt;220&gt; FEATURE:

219 &lt;221&gt; NAME/KEY: MISC\_FEATURE

220 &lt;222&gt; LOCATION: (10)..(10)

221 &lt;223&gt; OTHER INFORMATION: X is glycine or an amino acid that can be conservatively substituted in place thereof.

224 &lt;220&gt; FEATURE:

225 &lt;221&gt; NAME/KEY: MISC\_FEATURE

226 &lt;222&gt; LOCATION: (11)..(11)

227 &lt;223&gt; OTHER INFORMATION: X is threonine or an amino acid that can be conservatively substituted in place thereof.

230 &lt;220&gt; FEATURE:

231 &lt;221&gt; NAME/KEY: MISC\_FEATURE

232 &lt;222&gt; LOCATION: (12)..(12)

233 &lt;223&gt; OTHER INFORMATION: X is any number of integers of any amino acid.

235 &lt;220&gt; FEATURE:

236 &lt;221&gt; NAME/KEY: MISC\_FEATURE

237 &lt;222&gt; LOCATION: (13)..(13)

238 &lt;223&gt; OTHER INFORMATION: X is tryptophan or an amino acid that can be conservatively substituted in place thereof.

241 &lt;220&gt; FEATURE:

*variable length not permitted. See item 5 on Error Summary Sheet.*

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/635,265A

DATE: 01/13/2004

TIME: 15:17:21

Input Set : A:\180-158-2 seq listing.ST25rev1.txt

Output Set: N:\CRF4\01132004\J635265A.raw

242 <221> NAME/KEY: MISC\_FEATURE  
 243 <222> LOCATION: (14)..(14)  
 244 <223> OTHER INFORMATION: X is aspartic acid or an amino acid that can be  
 conservatively  
 245 substituted in place thereof.  
 247 <220> FEATURE:  
 248 <221> NAME/KEY: MISC\_FEATURE  
 249 <222> LOCATION: (15)..(25)  
 250 <223> OTHER INFORMATION: X is any amino acid.  
 252 <400> SEQUENCE: 3  
 W--> 254 Asp Xaa Glu Glu Xaa Asp Pro Xaa Asp Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
 255 1 5 10 15  
 258 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Gly Gly  
 259 20 25  
 262 <210> SEQ ID NO: 4  
 263 <211> LENGTH: 290  
 264 <212> TYPE: PRT  
 265 <213> ORGANISM: Artificial  
 267 <220> FEATURE:  
 268 <223> OTHER INFORMATION: Li-sensitive sequence uniting motif for Impase1.  
 271 <220> FEATURE:  
 272 <221> NAME/KEY: MISC\_FEATURE  
 273 <222> LOCATION: (1)..(46)  
 274 <223> OTHER INFORMATION: X is any amino acid.  
 276 <220> FEATURE:  
 277 <221> NAME/KEY: MISC\_FEATURE  
 278 <222> LOCATION: (48)..(69)  
 279 <223> OTHER INFORMATION: X is any amino acid.  
 281 <220> FEATURE:  
 282 <221> NAME/KEY: MISC\_FEATURE  
 283 <222> LOCATION: (72)..(89)  
 284 <223> OTHER INFORMATION: X is any amino acid.  
 286 <220> FEATURE:  
 287 <221> NAME/KEY: MISC\_FEATURE  
 288 <222> LOCATION: (96)..(218)  
 289 <223> OTHER INFORMATION: X is any amino acid.  
 291 <220> FEATURE:  
 292 <221> NAME/KEY: MISC\_FEATURE  
 293 <222> LOCATION: (221)..(231)  
 294 <223> OTHER INFORMATION: X is any amino acid.  
 296 <220> FEATURE:  
 297 <221> NAME/KEY: MISC\_FEATURE  
 298 <222> LOCATION: (234)..(290)  
 299 <223> OTHER INFORMATION: X is any amino acid.  
 301 <400> SEQUENCE: 4  
 W--> 303 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
 304 1 5 10 15  
 307 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
 308 20 25 30  
 311 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Asp Xaa

## RAW SEQUENCE LISTING

DATE: 01/13/2004

PATENT APPLICATION: US/10/635,265A

TIME: 15:17:21

Input Set : A:\180-158-2 seq listing.ST25rev1.txt

Output Set: N:\CRF4\01132004\J635265A.raw

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312          35          40          45
315 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
316      50          55          60
319 Xaa Xaa Xaa Xaa Xaa Glu Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
320 65          70          75          80
323 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Asp Pro Ile Asp Gly Thr Xaa
324          85          90          95
327 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
328          100          105          110
331 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
332          115          120          125
335 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
336      130          135          140
339 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
340 145          150          155          160
343 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
344          165          170          175
347 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
348          180          185          190
351 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
352          195          200          205
355 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Trp Asp Xaa Xaa Xaa Xaa
356      210          215          220
359 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Gly Gly Xaa Xaa Xaa Xaa Xaa Xaa Xaa
360 225          230          235          240
363 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
364          245          250          255
367 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
368          260          265          270
371 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
372          275          280          285
375 Xaa Xaa
376      290
379 <210> SEQ ID NO: 5
380 <211> LENGTH: 399
381 <212> TYPE: PRT
382 <213> ORGANISM: Artificial
384 <220> FEATURE:
385 <223> OTHER INFORMATION: Li-sensitive sequence uniting motif for lptase.
388 <220> FEATURE:
389 <221> NAME/KEY: MISC_FEATURE
390 <222> LOCATION: (1)..(53)
391 <223> OTHER INFORMATION: X is any amino acid.
393 <220> FEATURE:
394 <221> NAME/KEY: MISC_FEATURE
395 <222> LOCATION: (55)..(78)
396 <223> OTHER INFORMATION: X is any amino acid.
398 <220> FEATURE:
399 <221> NAME/KEY: MISC_FEATURE

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RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/635,265ADATE: 01/13/2004  
TIME: 15:17:22Input Set : A:\180-158-2 seq listing.ST25rev1.txt  
Output Set: N:\CRF4\01132004\J635265A.raw

## Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:3; Xaa Pos. ~~2, 5, 8, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25~~  
Seq#:4; Xaa Pos. ~~1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22~~  
Seq#:4; Xaa Pos. ~~23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41~~  
Seq#:4; Xaa Pos. ~~42, 43, 44, 45, 46, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61~~  
Seq#:4; Xaa Pos. ~~62, 63, 64, 65, 66, 67, 68, 69, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82~~  
Seq#:4; Xaa Pos. ~~83, 84, 85, 86, 87, 88, 89, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105~~  
Seq#:4; Xaa Pos. 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119  
Seq#:4; Xaa Pos. 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133  
Seq#:4; Xaa Pos. 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147  
Seq#:4; Xaa Pos. 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161  
Seq#:4; Xaa Pos. 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175  
Seq#:4; Xaa Pos. 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189  
Seq#:4; Xaa Pos. 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203  
Seq#:4; Xaa Pos. 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217  
Seq#:4; Xaa Pos. ~~218, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 234, 235~~  
Seq#:4; Xaa Pos. 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249  
Seq#:4; Xaa Pos. 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263  
Seq#:4; Xaa Pos. 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277  
Seq#:4; Xaa Pos. ~~278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290~~  
Seq#:5; Xaa Pos. ~~1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22~~  
Seq#:5; Xaa Pos. 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41  
Seq#:5; Xaa Pos. 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 55, 56, 57, 58, 59, 60, 61  
Seq#:5; Xaa Pos. 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 81, 82  
Seq#:5; Xaa Pos. 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101  
Seq#:5; Xaa Pos. 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115  
Seq#:5; Xaa Pos. 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129  
Seq#:5; Xaa Pos. 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143  
Seq#:5; Xaa Pos. 144, 145, 146, 147, 148, 149, 150, 151, 152, 159, 160, 161, 162, 163  
Seq#:5; Xaa Pos. 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177  
Seq#:5; Xaa Pos. 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191  
Seq#:5; Xaa Pos. 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205  
Seq#:5; Xaa Pos. 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219  
Seq#:5; Xaa Pos. 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233  
Seq#:5; Xaa Pos. 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247  
Seq#:5; Xaa Pos. 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261  
Seq#:5; Xaa Pos. 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275  
Seq#:5; Xaa Pos. 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289  
Seq#:5; Xaa Pos. 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303  
Seq#:5; Xaa Pos. 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 317, 318, 319  
Seq#:5; Xaa Pos. 320, 321, 322, 323, 324, 325, 326, 327, 330, 331, 332, 333, 334, 335  
Seq#:5; Xaa Pos. 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349  
Seq#:5; Xaa Pos. 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363  
Seq#:5; Xaa Pos. 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377  
Seq#:5; Xaa Pos. 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391



RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/635,265A

DATE: 01/13/2004  
TIME: 15:17:22

Input Set : A:\180-158-2 seq listing.ST25rev1.txt  
Output Set: N:\CRF4\01132004\J635265A.raw

Seq#:5; Xaa Pos. 392,393,394,395,396,397,398,399  
Seq#:6; Xaa Pos. 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22  
Seq#:6; Xaa Pos. 23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41  
Seq#:6; Xaa Pos. 42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60  
Seq#:6; Xaa Pos. 61,62,63,64,65,66,67,68,69,70,71,72,73,74,76,77,78,79,80  
Seq#:6; Xaa Pos. 81,82,83,84,85,86,87,88,89,90,91,92,93,94,95,96,97,100,101  
Seq#:6; Xaa Pos. 102,103,104,105,106,107,108,109,110,111,112,113,114,115

Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete,  
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24

**VERIFICATION SUMMARY**

PATENT APPLICATION: US/10/635,265A

DATE: 01/13/2004

TIME: 15:17:22

Input Set : A:\180-158-2 seq listing.ST25rev1.txt

Output Set: N:\CRF4\01132004\J635265A.raw

L:10 M:270 C: Current Application Number differs, Replaced Current Application No

L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:254 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0

M:341 Repeated in SeqNo=3

L:303 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0

M:341 Repeated in SeqNo=4

L:420 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0

M:341 Repeated in SeqNo=5

L:561 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0

M:341 Repeated in SeqNo=6